

IN THE ABSTRACT

Please replace the abstract with the following rewritten abstract:

A2 --A group of sentences to be recognized is obtained from an application and, using parsing logic, each target sentence to be recognized is divided into words, e.g., speech recognition units. Thereafter, the words in each target sentence are examined to determine whether among them there are unknown words that are not registered in the speech recognition dictionary, but for which the sounds-like spelling is available. If an unknown word is found, a base form, for which the pronunciation is inferred from the sounds-like spelling, is prepared and is registered in the speech recognition dictionary. This base form is employed when the voice of a user, who has orally designated one of the sentences, is recognized.--

IN THE CLAIMS

Please amend claims 1-15 as follows:

1. (Amended) A voice information registration method, employed by a speech recognition apparatus, comprising:

(a) obtaining a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) obtaining a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N;

A3 (c) obtaining a base form based on said sounds-like spelling of said word; and

(d) registering said base form in a speech recognition dictionary in correlation with said word.

2. (Amended) A sentence specification method, employed by a speech recognition apparatus, comprising:

a registration step including:

(a1) obtaining a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two,

(a2) obtaining a sounds-like spelling for a word that is included in an i -th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N ,

(a3) obtaining a base form based on said sounds-like spelling of said word, and

(a4) registering said base form in a speech recognition dictionary in correlation with said word; and

a recognition step including:

(b1) obtaining voice information that is input as a user reads and vocally reproduces a display corresponding to said i -th sentence,

(b2) employing said base form to recognize said voice information and to select a speech recognition sentence, and

(b3) comparing said i -th sentence with said selected speech recognition sentence.

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3. (Amended) The sentence specification method according to claim 2, wherein said group of sentences is obtained from an application, said method further comprising a step of generating a control message corresponding to said i -th sentence and transmitting said control message to said application.

4. (Amended) The sentence specification method according to claim 2, wherein a sounds-like spelling score is stored in correlation with the sounds-like spelling of said word, wherein a pronunciation score is stored in correlation with said base form, and wherein, when a function value that is obtained by using said sounds-like spelling score and said pronunciation score exceeds a threshold value, said base form is registered in a speech recognition dictionary.

5. (Amended) A sentence specification method, employed by a speech recognition apparatus, comprising:

a registration step including:

(a1) obtaining a sentence group, which includes a first to an N -th sentence, wherein N is a number equal to or greater than two,

(a2) obtaining a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N,

(a3) obtaining a base form based on said sounds-like spelling of said word,

(a4) calculating a score for said base form, and

(a5) registering said base form, when said score for said base form exceeds a threshold value, in said speech recognition dictionary in correlation with said word; and

a recognition step including:

(b1) obtaining voice information that is input as a user reads and vocally reproduces a display corresponding to said i-th sentence,

(b2) employing said base form to recognize said voice information and to select a speech recognition sentence,

A3 (b3) comparing said i-th sentence with said selected speech recognition sentence,

(b4) performing a process associated with a sentence for which a match is obtained when it is found that said i-th sentence and said selected speech recognition sentence match,

(b5) updating said threshold value to provide a smaller second threshold value when only part of said selected speech recognition sentence is matched by said i-th sentence,

(b6) detecting an unknown word that is included in said i-th sentence,

(b7) obtaining a sounds-like spelling of said unknown word,

(b8) obtaining a second base form based on said sounds-like spelling for said unknown word,

(b9) calculating the score for said second base form, and

(b10) registering said score in said speech recognition dictionary, in correlation with said unknown word, when said score for said second base form exceeds said second threshold value.

6. (Amended) A speech recognition apparatus, comprising:

(a) a sentence specification unit for obtaining a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) an unknown word detector for obtaining a sounds-like spelling for a word that is included in an i -th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N ;

(c) a base form generator for obtaining a base form based on said sounds-like spelling of said word; and

(d) a speech recognition dictionary to which said base form is stored in correlation with said word.

7. (Amended) A speech recognition apparatus, comprising:

(a) a sentence specification unit for obtaining a sentence group, which includes a first to an N -th sentence, wherein N is a number equal to or greater than two;

A3 (b) an unknown word detector for obtaining a sounds-like spelling for a word that is included in an i -th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N ;

(c) a base form generator for obtaining a base form based on said sounds-like spelling of said word;

(d) a speech recognition dictionary in which said base form is stored in correlation with said word;

(e) a voice input unit for obtaining voice information that is input as a user reads and vocally reproduces a display corresponding to said i -th sentence; and

(f) a speech recognition engine for employing said base form to recognize said voice information and to select a speech recognition sentence;

wherein said sentence specification unit compares said i -th sentence with said selected speech recognition sentence.

8. (Amended) The speech recognition apparatus according to claim 7, wherein said sentence specification unit obtains said group of sentences from an application, generates a control message corresponding to said i -th sentence, and transmits said control message to said application.

9. (Amended) The speech recognition apparatus according to claim 7, wherein a sounds-like spelling score is stored in correlation with the sounds-like spelling of said word, wherein a pronunciation score is stored in correlation with said base form, and wherein, when a function value that is obtained by using said sounds-like spelling score and said pronunciation score exceeds a threshold value, said base form is registered in a speech recognition dictionary.

10. (Amended) A speech recognition apparatus, comprising:

(a) a sentence specification unit for obtaining a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) an unknown word detector for obtaining a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N;

A3 (c) a base form generator for obtaining a base form based on said sounds-like spelling of said word, and for calculating a score for said base form;

(d) a speech recognition dictionary in which, when said score for said base form exceeds a threshold value, said base form is registered in said speech recognition dictionary in correlation with said word;

(e) a voice input unit for obtaining voice information that is input as a user reads and vocally reproduces a display corresponding to said i-th sentence; and

(f) a speech recognition engine for employing said base form to recognize said voice information and to select a speech recognition sentence;

wherein said sentence specification unit compares said i-th sentence with said selected speech recognition sentence, performs a process associated with a sentence for which a match is obtained when it is found that said i-th sentence and said selected speech recognition sentence match, updates said threshold value to provide a smaller second threshold value when only part of said selected speech recognition sentence is matched by said i-th sentence, instructs said unknown word detector to detect an unknown word that is included in said i-th sentence and to obtain a sounds-like spelling of said unknown word, instructs said base form generator to obtain a second base form based on said

sounds-like spelling for said unknown word and to calculate the score for said second base form, and registers said score in said speech recognition dictionary, in correlation with said unknown word, when said score for said second base form exceeds said second threshold value.

11. (Amended) A storage medium in which a program for specifying a sentence is stored to be executed by a speech recognition apparatus, said program comprising:

(a) program code for instructing said speech recognition apparatus to obtain a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) program code for instructing said speech recognition apparatus to obtain a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N;

A3 (c) program code for instructing said speech recognition apparatus to obtain a base form based on said sounds-like spelling of said word; and

(d) program code for instructing said speech recognition apparatus to register said base form in a speech recognition dictionary in correlation with said word.

12. (Amended) A storage medium in which a program for specifying a sentence is stored to be executed by a speech recognition apparatus, said program comprising:

(a) program code for instructing said speech recognition apparatus to obtain a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) program code for instructing said speech recognition apparatus to obtain a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N;

(c) program code for instructing said speech recognition apparatus to obtain a base form based on said sounds-like spelling of said word;

(d) program code for instructing said speech recognition apparatus to register said base form in a speech recognition dictionary in correlation with said word;

(e) program code for instructing said speech recognition apparatus to obtain voice information that is input as a user reads and vocally reproduces a display corresponding to said i-th sentence;

(f) program code for instructing said speech recognition apparatus to employ said base form to recognize said voice information and to select a speech recognition sentence; and

(g) program code for instructing said speech recognition apparatus to compare said i-th sentence with said selected speech recognition sentence.

A3 13. (Amended) The storage medium according to claim 12, wherein said group of sentences is obtained from an application, and wherein program code is stored to instruct said speech recognition apparatus to generate a control message corresponding to said i-th sentence and to transmit said control message to said application.

14. (Amended) The storage medium according to claim 12, wherein a sounds-like spelling score is stored in correlation with the sounds-like spelling of said word, wherein a pronunciation score is stored in correlation with said base form, and wherein, when a function value that is obtained by using said sounds-like spelling score and said pronunciation score exceeds a threshold value, said base form is registered in a speech recognition dictionary.

15. (Amended) A storage medium in which a program for specifying a sentence is stored to be executed by a speech recognition apparatus, said program comprising:

(a) program code for instructing said speech recognition apparatus to obtain a sentence group, which includes a first to an N-th sentence, wherein N is a number equal to or greater than two;

(b) program code for instructing said speech recognition apparatus to obtain a sounds-like spelling for a word that is included in an i-th sentence, but is not entered in a speech recognition dictionary, wherein i is a number equal to or less than N;

(c) program code for instructing said speech recognition apparatus to obtain a base form based on said sounds-like spelling of said word;

(d) program code for instructing said speech recognition apparatus to calculate a score for said base form;

(e) program code for instructing said speech recognition apparatus to register said base form, when said score for said base form exceeds a threshold value, in said speech recognition dictionary in correlation with said word;

(f) program code for instructing said speech recognition apparatus to obtain voice information that is input as a user reads and vocally reproduces a display corresponding to said i-th sentence;

(g) program code for instructing said speech recognition apparatus to employ said base form to recognize said voice information and to select a speech recognition sentence;

(h) program code for instructing said speech recognition apparatus to compare said i-th sentence with said selected speech recognition sentence;

(i) program code for instructing said speech recognition apparatus to perform a process associated with a sentence for which a match is obtained when it is found that said i-th sentence and said selected speech recognition sentence match;

(j) program code for instructing said speech recognition apparatus to update said threshold value to provide a smaller second threshold value when only part of said selected speech recognition sentence is matched by said i-th sentence;

(k) program code for instructing said speech recognition apparatus to detect an unknown word that is included in said i-th sentence,

(l) program code for instructing said speech recognition apparatus to obtain a sounds-like spelling of said unknown word;

(m) program code for instructing said speech recognition apparatus to obtain a second base form based on said sounds-like spelling for said unknown word;

(n) program code for instructing said speech recognition apparatus to calculate the score for said second base form; and

(o) program code for instructing said speech recognition apparatus to register said score in said speech recognition dictionary, in correlation with said unknown word, when said score for said second base form exceeds said second threshold value.